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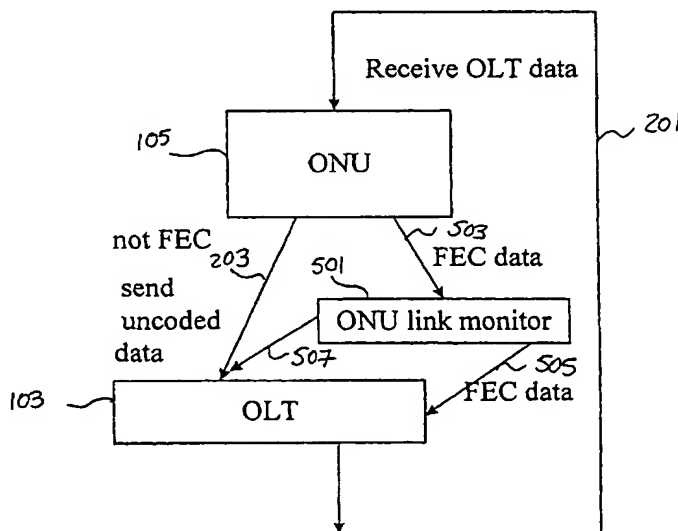
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(54) Title: METHOD OF ETHERNET FRAME FORWARD ERROR CORRECTION INITIALIZATION AND AUTO-NEGOTIATION



(57) Abstract: A method of managing forward error correction (FEC) initialization and auto-negotiation in ethernet passive optical networks includes receiving FEC data from an optical network unit (ONU 105), and the optical line terminal (OLT 103) responds to the ONU with FEC data. Upon receiving data not forward error corrected from an ONU. The OLT responds with data not coded for FEC (203). Similarly, upon receiving forward error corrected data from the OLT, the ONU responds with forward error corrected data (503); and upon receiving data not forward error corrected from the OLT, the ONU responds with data not forward error corrected (203). The communications quality from the ONU is monitored (501), if the communications quality is not sufficient, the OLT transmits forward error corrected data to the ONU; otherwise, the OLT transmits non-FEC data to the ONU.

International application No.

**PCT/IL03/01082**

### A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04B 10/00, 10/12

US CL : 398/140, 151, 154

**According to International Patent Classification (IPC) or to both national classification and IPC**

**B. FIELDS SEARCHED**

**Minimum documentation searched (classification system followed by classification symbols)**

U.S. : 398/140, 151, 154

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,721,742 A (OKAJIMA et al) 24 FEBRUARY 1998 (24.02.1998) FIG 1-3	1-6
Y	US 6,477,669 B1 (AGARWAL et al) 02 NOVEMBER 2002 (02.11.2002) FIG 1A, 5	1-6
Y	US 3,893,072 (D'ANTONIO et al) 01 JULY 1975 (01.07.1975) FIG ABSTRACT	1-6
Y	US 6,314,535 B1 (MORRIS et al) 06 NOVEMBER 2001 (06.11.2001) FIG 4A, 4B	1-6
Y	US 5,699,365 A (KLAYMAN et al) 16 DECEMBER 1997 (16.12.1997) ABSTRACT	1-6

☐ Further documents are listed in the continuation of Box C.

**See patent family annex.**

Special categories of cited documents:		T	
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"B"	earlier application or patent published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O"	document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family
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